

Paper for Council for Economic Renewal

Green Economy Route Map

Introduction

1. Peter Davies, Climate Change Commissioner for Sustainable Futures, is exploring the role of Green Growth in Wales and its effect on the economy.
2. The Minister for Economy, Science and Transport has asked that a paper be brought forward to the Council for Economic Renewal to discuss the proposals.

Background

3. A breakfast briefing was held on 5th December 2012 with interested parties to discuss the approach. This was followed up with a stakeholder roundtable discussion.
4. An initial draft paper, taking into account the outcomes of the briefing and roundtable discussion, was presented by Peter Davies and PWC to the Council for Economic Renewal Working Group meeting on 24 April.
5. The Working Group expressed their support for the approach and agreed that the paper should be further developed and presented to the Council for Economic Renewal for further consideration.

Purpose

6. The attached paper introduces the work of the Climate Change Commission for Wales around green growth and sets out proposed actions.
7. The Council for Economic Renewal is asked:
 - a. to consider if the concept is supported and, if so
 - b. Note that early actions would involve.
 - i. Incorporating green growth concepts into existing and future activities.
 - ii. Developing green growth opportunities via European Structural Funds,
 - iii. Working with relevant stakeholders to link up existing policy initiatives

Climate Change Commission Paper to the Council for Economic Renewal 3rd June 2013 Green Economy Route Map

Summary

The purpose of this paper is to introduce the Climate Change Commission for Wales work around green growth. The approach outlined here supports delivery of the Programme for Government and is also about raising the profile of the “Wales brand”. The Minister for Economy, Science and Transport has agreed to a paper being put forward to the Council for Economic Renewal seeking their support for further development of this work.

“Green growth” is commonly understood to be a means to achieve **economic progress that is environmentally sustainable and socially inclusive**. It has been successfully implemented in a number of other countries in recent years, making them more attractive places to live and work.

Although Wales has a number of initiatives that touch on sustainable economic development, they are not linked up. Green growth provides a way to connect our existing policy framework with our unique selling points to ensure Wales is the “go to” place for successful and sustainable investment.

We are therefore seeking support from the Council for Economic Renewal to explore and develop green growth in Wales.

If supported, early actions would **involve incorporating green growth concepts into activities, developing green growth opportunities via European Structural Funds and working with relevant stakeholders to link up existing policy initiatives** so that we are able to maximise our ability to develop our economy in a sustainable way.

The success of this proposal is dependent on the active participation of stakeholders from public, private and third sectors. It is therefore critical that high level support is gained from the very outset.

1. Green Growth Statement from the Climate Change Commission for Wales

The Climate Change Commission for Wales provides a multi-sectoral perspective on the economic, social and environmental developments that are required to ensure a Wales that is fit for the future. The Commission considers that green growth should encapsulate economic, social and environmental prosperity, long term resilience, innovation and equity for the whole of the economy. It should maximise existing and future low carbon technologies and knowledge bases so that Wales becomes the “go to” place for successful and sustainable investment.

2. The Global Context

The global economy has expanded, benefitting hundreds of millions of people but at a considerable cost to the environment. Today there are serious doubts as to whether the current growth model can deliver on the sustainable development goals set out in the 1992 Rio Declaration. Existing public policies and market incentives have enabled businesses to run up large social and environmental 'debts', to the extent that some 60% of the world's ecosystem goods and services that underpin livelihoods are now considered degraded.

Existing economic growth is fundamentally based on using natural and social capital to create physical and financial capital. The global recession, alongside fears about our planet's ability to feed and fuel the 7 billion and rising population, and growing recognition of the impacts of anthropogenic climate change have convinced many that the current growth model is untenable. The key challenge of our generation is to identify and deliver a new growth narrative. Ireland and New Zealand have already started this process (see Appendices B and C) and provide some useful learning points.

The result is a growing interest in the concept of a 'green economy' that maintains and creates further growth in an increasingly resource-constrained world. Green growth reflects a need to avoid and curb greenhouse gas emissions, use resources more efficiently, provide long-term sustainable increases in GDP and standards of living, and value the often economically invisible natural assets that have underpinned economic success over the centuries. This will necessarily involve decoupling economic growth from biodiversity and ecosystem degradation and depletion.

We distinguish here between specific low carbon growth and broader economic sustainable development. The focus of green growth is the latter, as it is recognised that in a competitive global marketplace, companies will invest where there are the best conditions to enable long term growth. This does not exclude the low carbon technologies sector, but rather includes it along with other sectors.

Such measures need to go hand-in-hand with the creation of opportunities for long term jobs, welfare improvements, efficiency gains, cost reductions as well as for new products and innovations. It is estimated that the low carbon and environmental goods and services market contributes USD 5 trillion worldwide. Wales should claim its' fair share of this market.

Green growth opportunities also include:

- the development of technologies for more efficient use of natural capital (e.g. water, soil and fossil fuels)
- the recycling of materials
- the development of cleaner (less polluting) goods and services
- the use of natural capital for recreation and resilience
- harnessing the power from natural resources (eg. wind, water)
- the design of products derived from biodiversity.

3. The Welsh Context- Unique Selling Points for Wales

Such opportunities are part of the growing global green economy. Other countries are embracing this approach and it is important that Wales demonstrates its' ability to be one of the leaders in this area. We are already at the global forefront of sustainable development, as demonstrated via our groundbreaking commitment to Sustainable Development as a central organising principle, the widespread adoption of the Sustainable Development Charter and the impending Sustainable Development Bill. Within this context, Wales is well placed to become a world leader in green growth.

The prevalence of SMEs, coupled with a broad range of natural resources means that local innovation is strong and supply chains can be short. Wales also has significant renewable energy resources, capable of supporting large scale industrial operations, on which we are particularly reliant. We need to improve the competitive advantage of such operations in a way that supports sustainable economic development. Underpinning these activities is the knowledge sector, which in Wales is strong. Partnerships between industry and academia are well established and activities around circular economies, focussing on re-use of resources, is rapidly emerging.

Together these form a solid foundation for green growth- which in this case might focus upon localisation of supply chains, minimising energy costs for industry and supporting innovation.

It is recognised that thorough consideration needs to go into how best to maximise the green growth potential and also how to operationalise concepts, taking account of local characteristics (see Appendix A). It is also recognised that Welsh Government plays a central role in supporting the development of green growth in Wales, from contributing to the development of a shared vision, to addressing challenges to achieving that vision. Welsh Government are also able to influence the leadership that will be required to carry us from where we are now to where we want to be.

It is proposed that developing green growth can drive significant business investment and create sustainable economic, social and environmental benefits. However, in order to achieve this, a major transformation of our economies, policies, technologies and modes of production and consumption is requiredⁱ. If Wales is to reach its full potential as a global green economy leader we need to think strategically about how we can make the transition a reality.

Green growth will provide a framework for achieving this. In particular, it will provide a way to learn from previous experiencesⁱⁱ, identify and address barriers, support the development of a circular economy and make Wales more attractive for sustainable investment. The approach will also provide improved co-ordination of existing activities that will allow us to deliver the cross-sectoral demands of successful broader economic development.

4. Critical Success Factors for Wales

The Climate Change Commission for Wales has already started to engage with stakeholders to consider the critical factors that may influence the success of green growth in Wales. Within the context of existing initiatives (see Appendix A) and taking account of case studies of competitor countries (see Appendices B and C) these include:

- 1) Governance: which should be clear, credible and long term
- 2) Policy: which should be enabling (while also maintaining a competitive environment)
- 3) Decision making and implementation: which should be top-down as well as bottom up
- 4) Approaches: which should be integrated across the whole of the economy including the public and third sectors
- 5) Capacity for delivery: organisations and individuals require the knowledge, skills, tools and support structures to be able to deliver. Accreditation may play a role, as might cross sectoral transfer
- 6) Evidence: which should be used to monitor the success of developments (note the need to identify ways to value non-tangible assets such as levels of health and wellbeingⁱⁱⁱ)
- 7) Encouragement: incentives should be used to reward good practice (not necessarily financial).
- 8) Finance: resources will be needed to unlock potential in Wales. This could include successful use of the green growth planning framework to draw down EU Structural Funds in the next programming period.

While these provide a starting point, it is acknowledged that Wales Plc. needs to contribute to the vision and be part of the development process. If the proposal progresses, a wider group of stakeholders, from the public, private and third sectors (many of who already have their own Corporate Social responsibility initiatives) should be an intrinsic part of the development and implementation programme. Effective engagement is critical to this.

5. Approach to Green Growth

PwC (PricewaterhouseCoopers LLP) has developed an approach to green growth that could be adapted to reflect the objectives and priorities of Wales. The approach was presented to the Climate Change Commission at the December 2012 and January 2013 breakfast meetings and is summarised below.

The approach is characterised by the 'green growth flower' (see Figure 1). The flower captures the complex and integrated nature of delivering transformational change, and is based on 5 dimensions of green growth:

- 1) Economic growth (including GDP growth, jobs creation)
- 2) Climate change and environmental resilience

- 3) Social development and poverty alleviation (including welfare improvements and equitable growth)
- 4) Biodiversity and ecosystem services (including resource security and efficiency gains)
- 5) GHG emissions avoidance and reduction.

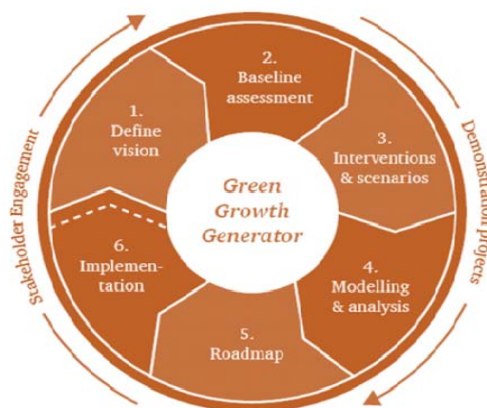
Figure 1: The Green Growth Flower



The approach can be flexed to emphasize those elements that are of highest priority to Wales. For instance, green growth could mean success in some or all of these dimensions (e.g. economic growth and poverty alleviation), but most importantly it is about achieving a balance across potentially competing objectives that is well aligned and integrated with other national economic goals and recognising where there may be synergies.

The process is based on PwC's 'green growth generator' (Figure 2), which sets out the steps required to develop a roadmap and implementation plan. More detail on this is provided in Appendix D.

Figure 2. Steps for Developing the Roadmap – The 'Green Growth Generator'



The roadmap presents the agreed interventions, helps to build consensus and provides a tool to plan and co-ordinate the transition to a green economy. It also includes interventions that have been modelled and analysed for their potential to reduce emissions and create jobs.

6. Conclusions and Next Steps

The work proposed by the Climate Change Commission for Wales consolidates work being developed by the Confederation of British Industry^{iv} and others to encourage green growth in the UK. It directly contributes towards the successful implementation of the Programme for Government^v, particularly the elements relating to growth and sustainability. As part of that, the work also supports the high level aims of the newly established Natural Resources Wales, specifically those that relate to safeguarding natural resources upon which businesses rely.

If supported by the Council for Economic Renewal, early actions would involve :

- 1. incorporating green growth concepts into existing and future activities**
- 2. developing green growth opportunities via European Structural Funds**
- 3. working with relevant stakeholders to link up existing policy initiatives.**

These actions, possibly supported by an awareness raising campaign, would allow us to maximise our ability to develop our economy in a sustainable way.

“What would success look like? We’d like to see an increase in sustainable investment and jobs in Wales. This might include localisation and shortening of supply chains, reduced energy costs for industry and improved academic and business innovation. Green growth can support this”.

Peter Davies, Commissioner for Sustainable Futures.

“Sustainable development has not yet been incorporated into industry planning and delivery and should be”.

Iestyn Davies, FSB.

“By 2018 energy prices are projected to have increased by 70%, we are therefore supportive of this agenda”.

Paul Byard, EEF.

(Ref: BIS, An international comparison of energy and climate change policies impacting energy intensive industries in selected countries. July 2012).

Appendix A: Contextual Initiatives, Organisations and Case Studies

Welsh Government Initiatives that Set the Context:

1. Programme for Government
 2. One Wales: One Planet
 3. Proposed SD Bill
 4. Climate Change Strategy
 5. Climate Group's Clean Revolution Campaign
 6. Corporate Social Responsibility Framework
 7. Energy Wales- A Low Carbon Transition
 8. European Funding Programmes (RDP, ERDF, FP7, Structural Funds etc)
 9. Natural Environment Framework
 10. Next Generation Broadband Wales and ICT and Digital Infrastructure and support
 11. Enterprise Zones (with business rates scheme)
 12. Science and Innovation
 13. Sector Delivery Plan (creative industries, ICT, energy and environment, advanced materials and manufacturing, life sciences, financial and professional services, food and farming, construction, tourism)
 14. Support for SMEs and Business Support Schemes
 15. Sustainable Development Bill
 16. Tackling Poverty Action Plan
 17. Towards Zero Waste
 18. Vibrant and Viable Places, A New Regeneration Framework
 19. Consideration of City Regions
 20. Consideration of Local Growth Zones in Powys.
 21. Consideration of a metro transport system for south east Wales
- Etc.

Some Key Partners and Institutions

1. Anchor and Regionally Important Companies
 2. Sector Panels
 3. Business in the Community
 4. Business Rates Review Group
 5. Carbon Trust & Energy Saving Trust
 6. Confederation of British Industry
 7. Climate Change Commission
 8. Federation of Small Businesses
 9. Institute of Directors
 10. Low Carbon Research Institute
 11. Natural Resources Wales
 12. Smart Growth
 13. Trade Union Congress
 14. WRAP
 15. Academia and the Professions
 16. Constructing Excellence in Wales
- Etc.

Best practice examples such as Tata, BT, Airbus, Toyota, SWALEC and others

Appendix B: Ireland Green Growth Case Study^{vi}

Initiatives focus upon the following sectors:

- a) Renewable energy
- b) Energy efficiency and resource efficiency
- c) Green products and services
- d) Green financial services
- e) Agriculture, marine and forestry
- f) Tourism
- g) Waste management
- h) Water management
- i) Low carbon transport
- j) Research development and innovation

*Note: the **Government** is listed as the main driver of green economic development for the sectors listed in the Irish case study. Eg.

Type of Measure	Example of specific action
Financial Support	<ul style="list-style-type: none"> • provision of financial support for onshore wind, hydro and biomass energy production;
	<ul style="list-style-type: none"> • incentivise electric vehicles;
	<ul style="list-style-type: none"> • invest in smart-meter infrastructure;
	<ul style="list-style-type: none"> • invest in R&D;
	<ul style="list-style-type: none"> • design a seed and venture capital scheme;
Information and Knowledge	<ul style="list-style-type: none"> • seek supply chain opportunities through Enterprise Ireland;
	<ul style="list-style-type: none"> • promotion and awareness raising campaigns;
	<ul style="list-style-type: none"> • encourage business to invest in low carbon vehicles;
	<ul style="list-style-type: none"> • ensure collaboration across relevant agencies;
	<ul style="list-style-type: none"> • education;
Implementation of Legislation, Policies and Action Plans	<ul style="list-style-type: none"> • introduce new legislation to provide for a new offshore licensing regime;
	<ul style="list-style-type: none"> • implement action plan on green procurement;
	<ul style="list-style-type: none"> • implement new waste policy (mandatory standards, maximise prevention, re-use, recovery and recycling).

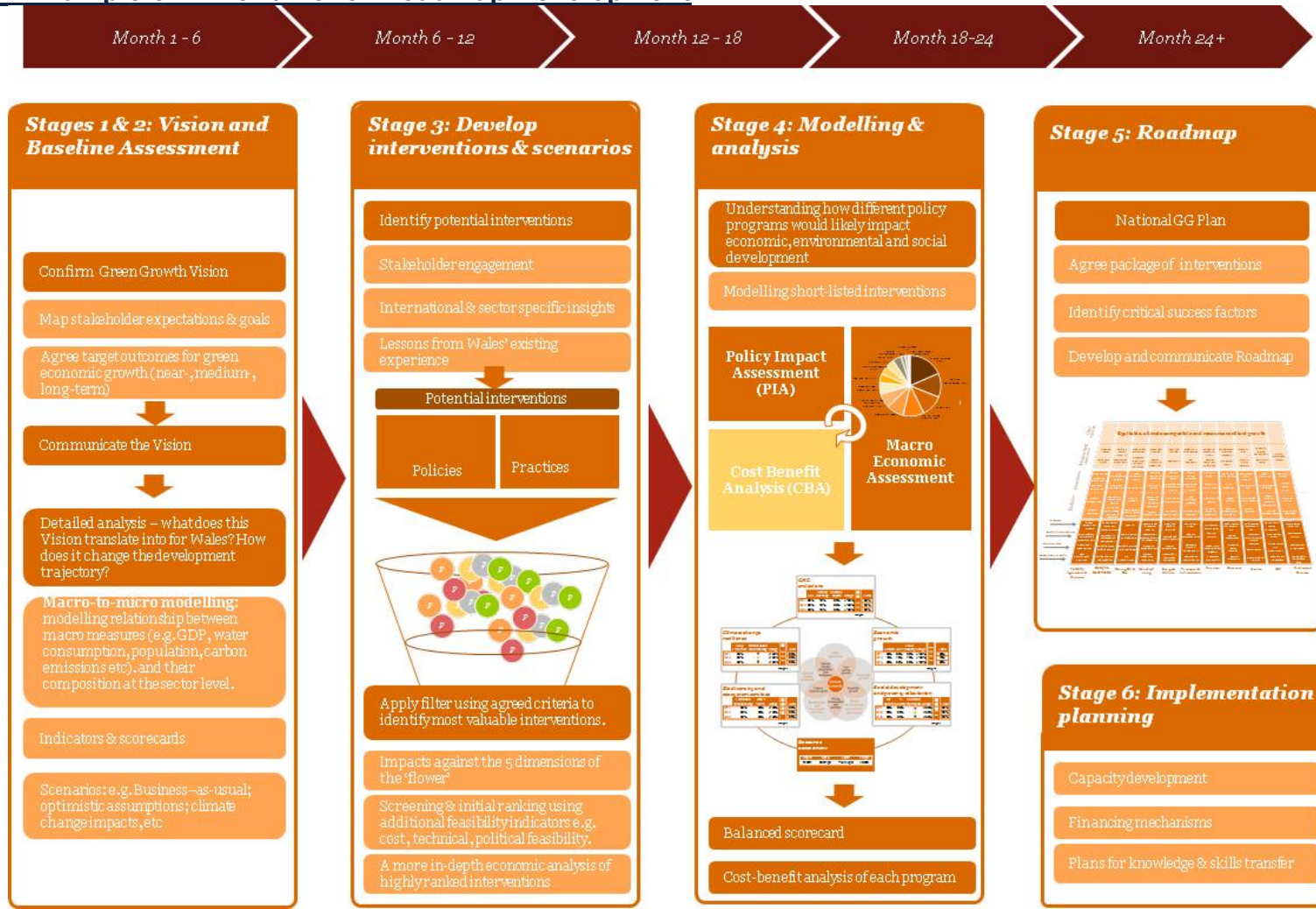
Appendix C: New Zealand Green Growth Case Study^{vii}

The New Zealand case study is primarily delivered by the private sector, although it is supported by the public sector.

	Sector	Recommended Measures
a)	Public sector	<ul style="list-style-type: none"> • support for businesses, especially small and medium-sized enterprises to build their capabilities for growth and environmental management; • development of New Zealand’s Innovation System; • develop and promote New Zealand’s brand in the global marketplace; • promote sustainable public sector procurement; • promote the voluntary adoption of standards and certification schemes; • invest in research and development; • investment in long term infrastructure and social programmes, long term biodiversity and environmental protection and community and regional development projects.
b)	Bio-diversity	<ul style="list-style-type: none"> • n/a
c)	Food and beverage	<ul style="list-style-type: none"> • use of economic analyses that place a value on natural capital and environmental services; • all stakeholders acknowledging the importance of this work to brand “New Zealand”, • applying sound science to protect and enhance national reputation and to improve industry performance; • develop more effective programmes for the transfer of new knowledge and technology; • make accessible to every farmer a practical ‘toolbox’ of technologies and actions; • managing diffuse sources of pollution and GHG emissions; • co-ordinated effort of agencies, industry groups and individual farmers; • invest in technologies and systems for the management of diffuse source pollution including GHG emissions. These could include technologies and systems such as wintering pads, nitrogen inhibitors, better uptake of rural broadband, other tools for precision agriculture, and other measures.
d)	Tourism	<ul style="list-style-type: none"> • increased uptake of environmental management systems and relevant certifications among New Zealand tourism; • clear promotion of “clean green” country brand attributes; • enhanced usage of online and social media

		<p>communications to reach tourists who are both more attuned to these channels and more attracted to environmental sustainability;</p> <ul style="list-style-type: none"> • develop and promote case studies of best practice
e)	High value manufacturing and services	<ul style="list-style-type: none"> • take up new and existing knowledge and technologies; • support professional skill development;
f)	Petroleum and minerals extraction	<ul style="list-style-type: none"> • adhere to regulatory requirements; • objective analysis of economic, social and environmental benefits; • objective analysis of costs and risks associated with further development and growth of the sector (including potential impacts on other exporting sectors of the economy)

Appendix D: Example of Timeframe for Roadmap Development



References

- ⁱ WWF (2012) Building Green Economies- Creating Prosperity for People and Planet. Downloaded from http://assets.wwf.org.uk/downloads/building_green_economies_oct_2012_lo.pdf on 9th April 2013.
- ⁱⁱ <http://wefo.wales.gov.uk/news/casestudies/?lang=en> Downloaded 10th April 2013.
- ⁱⁱⁱ PwC (2012) Good Growth for Cities. Downloaded from <http://www.pwc.co.uk/government-public-sector/good-growth/good-growth-for-cities-report.jhtml> on 16th April 2013.
- ^{iv} CBI (2012) The Colour of Growth- Maximising the Potential of Green Business. Confederation of British Industry
- ^v Welsh Government (2011) Programme for Government. Downloaded from <http://wales.gov.uk/docs/strategies/110929fullen.pdf> on 16th April 2013.
- ^{vi} Government of Ireland (2012) Delivering Our Green Potential- Government Policy Statement on Growth and Employment in the Green Economy.
- ^{vii} Green Growth Advisory Group (2011) Greening New Zealand's Growth- Report of the Green Growth Advisory Group. Downloaded from <http://www.med.govt.nz/sectors-industries/environment/pdf-docs-library/Greening%20New%20Zealands%20Growth.pdf> on 9th April 2013.